PLAN IMPLEMENTATION

224. To implement a plan at Ponce DeLeon Inlet, certain conditions and requirements are necessary to meet State, Local, and Federal standards set by law. A discussion of those responsibilities is in the subsequent paragraphs. On August 19, 1996 a meeting with the sponsor in DeLand, Florida occurred to explain the sponsor's cost sharing requirements and related responsibilities. The sponsor understands both areas of accountability.

PROJECT COOPERATION AGREEMENT

- 225. As of July 8, 1994, there is no longer a requirement to include an initial draft project cooperation agreement (PCA) when submitting draft feasibility reports. The model PCA and possible deviations based on the recommended plan were fully discussed with the non-Federal sponsor at the Feasibility Review Conference (FRC) in March 3, 1998. The non-Federal sponsor by their letter dated January 11, 1999 indicate that they understand the type of agreement that they will be expected to sign prior to the start of construction and that they must provide items of cooperation. The terms of local cooperation are in the recommendations section of this report.
- 226. No Federal commitments relating to a construction schedule or specific provisions of the PCA can be made to the non-Federal sponsor on any aspect of this project or separable element until:
 - (1) The feasibility report is approved by the U.S. Congress:
- (2) The project is budgeted as a new construction start, or construction funds are added by Congress, apportioned by the Office of Management and Budget, and their allocation is approved by the Assistant Secretary of the Army for Civil Works (ASA(CW)); and
- (3) The draft PCA has been reviewed and approved by the office of the (ASA(CW)).
- 227. The PCA will not be executed nor will construction be initiated on this project until the National Environmental Policy Act, the Clean Water Act, the Coastal Zone Management Act, the Endangered Species Act, the Fish and Wildlife Coordination Act, and the National Historic Preservation Act planning phase requirements are met. In the case of the Ponce DeLeon Inlet project, these requirements are met once the Draft Environmental Assessment (DEA) has been coordinated, comments prepared, and a Final Environmental Assessment (FEA) has been submitted to the Environmental Protection Agency for filing.

228. Final PCA negotiations with the non-Federal sponsor may be conducted, and the draft PCA package submitted through the Corps higher authority for review and approval by the ASA(CW), once the feasibility report is approved and the project is budgeted for construction. The PCA for this project will be executed only after the feasibility report is approved, and an Appropriations Bill containing funds for the project is enacted into Law. The Chief of Engineers will not allocate Federal construction funds for a project until the ASA(CW) approves the non-Federal sponsor's financing plan and executes the PCA.

PRELIMINARY FINANCIAL ANALYSIS

229. Financial analysis is required for any plan being considered for U.A. Army Corps of Engineers implementation that involves non-Federal cost sharing. The ultimate purpose of the financial analysis is to ensure that non-Federal sponsors understand the financial commitment involved and have reasonable plans for meeting that commitment. The financial analysis shall include the non-Federal sponsor's statement of financial capability, the non-Federal sponsor's financing plan, and an assessment of the sponsor's financial capability. These plans and analysis are part of the draft PCA package submitted to higher authority for review and approval once the feasibility report is approved and the project is budgeted for construction.

DIVISION OF PLAN RESPONSIBILITIES

- 230. In meeting its responsibilities, the non-Federal sponsor shall provide all lands, easements, rights-of-way, relocations, and dredged material disposal (LERRD) required for project modifications which are not otherwise available due to the construction of the existing project. As a general rule, fee title will be required for all lands needed to support implementation, operation, maintenance, repair, replacement or rehabilitation of the project modification.
- 231. Further, the non-Federal sponsor shall accomplish, or arrange for accomplishment, at no cost to the Government, all relocations (excluding existing railroad bridges and approaches thereto) determined by the Government to be necessary for implementation of the project modification.
- 232. The value and credit to LERRD provided for the project modification by the non-Federal sponsor shall be determined as described in Engineer Regulation 1165-2-131, "Project Cooperation Agreements for New Start Construction Projects," and Engineer Regulation 405-2-12. If the value of the identified LERRD represents less than 25 percent of the total project modification costs, the non-Federal sponsor shall provide, during the period of implementation, a cash contribution in the amount necessary to make its total contribution equal to 25 percent.

- 233. If the value of LERRD contributions exceeds 25 percent of the total project modification costs, the Government shall refund the excess to the non-Federal sponsor. However, the non-Federal sponsor shall not receive any credit for LERRD previously provided as an item of cooperation for another Federal project nor shall the value thereof be included in the total project modification costs.
- 234. Credit will be allowed for work-in-kind provided that these services do not result in a reimbursement by the Government and their combination with the LERRD does not exceed 25 percent of restoration project costs.

COST ALLOCATION

- 235. Under the Water Resources Development Act (WRDA) 1986, Federal participation in navigation projects is limited to sharing costs for design and construction of the general navigation features (GNF) consisting of breakwaters and jetties, entrance and primary access channels, turning basins, anchorage areas, structures designed to protect the channel from shoreline erosion, and locks. Non-federal interests are responsible for and bear all costs for provision of necessary lands, easements, rights-of-way and relocations; dredged material disposal areas with retaining dikes for the construction, operation, and maintenance of the GNF; local service facilities such as terminal facilities; dredging berthing areas and interior access channels to those berthing areas; and operation, maintenance, repair, replacement, and rehabilitation of dredged material disposal areas including dikes and other facilities.
- 236. Section 101(a)(1)(A) of WRDA 1986 specifies that for commercial navigation projects with a depth not in excess of 20 feet, cost sharing for construction of general navigation features is 90 percent Federal and 10 percent non-Federal. Aids to navigation are a 100 percent Federal cost. Section 103(c)(4) of WRDA 1986 mandates a non-Federal share equal to 50 percent of joint and separable costs allocated to recreational navigation. That cost share is paid during construction. Section 101(a)(2) of WRDA 1986 specifies that non-Federal interests shall pay an additional 10 percent of the cost of the general navigation features in cash over a period not to exceed 30 years, at an interest rate determined pursuant to Section 106 of WRDA 1986. The value of lands, easements, rights-of-way and dredged material disposal areas necessary for the project shall be credited toward this 30-year cash payment.
- 237. For commercial navigation projects with a depth less than 20 feet, cost sharing for operation and maintenance of general navigation features is 100 percent Federal. Operation and maintenance of navigation aids is a 100 percent Federal cost. Section 103(j)(1) requires the non-Federal sponsor to enter into an agreement to pay 100 percent of operation, maintenance, repair, replacement and rehabilitation (OMRR&R) costs associated with recreation.
- 238. For navigation projects producing commercial and recreational benefits, the costs of specific or separable project features will be allocated to the purposes served. The costs of jointly used general navigation facilities producing commercial and recreational benefits will be allocated to each use in proportion to the remaining benefits expected to accrue to each use (ER 1105-2-100, 1990, pages 6-181 & 6-182).

COST APPORTIONMENT

239. The total first cost of construction is the amount used for cost apportionment. That cost does not include the navigation aids provided by the USCG. The costs of construction eligible for cost apportionment are \$5,438,000 and were determined as follows:

Total First Cost of Plan \$5,454,000

Less: Navigation Aids (USCG) \$ (14,000)

RE Credit (Sponsor) \$ (4,000)

Cost Shared Amount \$5,436,000

- 240. For construction of the selected plan the amounts for cost apportionment are shown in Table 18. Amounts for cost apportionment for operations and maintenance are shown in Table 19.
- 241. Using an interest rate of 6 7/8% the cost shared percentages of 54.63 percent Federal and 45.37 percent non-Federal are applied to the cost shared amount of \$5,436,000 for construction of the south jetty extension. The resulting sponsor's share of the construction costs is \$2,466,000.
- 242. At the time of initial project construction the non-Federal sponsor paid a one-time fee for future operations and maintenance on the Ponce DeLeon Inlet project. Items of local cooperation state, "...Contribute in cash \$1,379,000 as the local share of cost of future maintenance to be performed by the Corps of Engineers, that amount to be placed in escrow when required by the Chief of Engineers prior to start of project construction and to be contributed upon completion of project construction by the Corps of Engineers...".
- 243. As mentioned under the future operations and maintenance section, O&M costs for the new navigation feature includes annual inspections and repairs. The AAEQ value for the \$1,000 per year inspection cost and the \$1,017,000 scour apron repair and crest restoration cost amounts to \$16,000. The AAEQ value is figured for an economic analysis period of 50 years at a current interest rate of 6.875 percent. The present value of the O&M \$16,000 AAEQ cost is \$225,000.
- 244. The cost shared percentages of 15.43 percent Federal and 84.57 percent non-Federal are applied to the O&M present value cost of \$225,000 for operations and maintenance of the south jetty extension using an interest rate of 6 7/8%. The resulting sponsor's share of the O&M costs is a one-time payment of \$190,000. This amount will be put into an interest-bearing escrow account. Funds in the account will be used toward operations and maintenance costs associated with the south jetty extension.

FEDERAL RESPONSIBILITY

- 245. The U.S. Army Corps of Engineers is responsible for budgeting for the Federal share of construction costs for all future work for Federal projects. The Federal share of construction costs is estimated to be \$2,970,000. Federal funding is subject to budgetary constraints inherent in the formation of the national Civil Works budget for a given fiscal year. The Corps would perform the necessary preconstruction engineering and design needed prior to construction. The Corps would obtain all necessary permits (including State water quality certification) and would construct the project.
- 246. The total Federal cost of the project is \$2,988,000. This cost includes the Federal share of the construction costs (\$2,970,000), the cost of the navigation aids (\$14,000), and the real estate credit.
- 247. The Federal government is responsible for a portion of the operation and maintenance costs, including replacement costs necessary to maintain conditions as constructed throughout project life. The present worth of the Federal share of operation and maintenance costs is estimated to be \$35,000 at a 6 7/8% interest rate.

NON-FEDERAL RESPONSIBILITY

- 248. The non-Federal sponsor would provide an up-front cash contribution for initial construction costs of the proposed project. The non-Federal share of the construction costs is estimated to be \$2,466,000 if the entire 10% cash contribution over 30 years required by Section 101(a)(2) is paid at the time of construction. Other non-Federal responsibilities must be assumed by the non-Federal sponsor before the project can be constructed. The items of local cooperation are listed in the section of this report entitled, "Recommendations". The delineation of Federal and non-Federal responsibility will be legally defined in the project cooperation agreement.
- 249. The non-Federal sponsor is responsible for a portion of the operation and maintenance costs, including replacement costs necessary to maintain conditions as constructed throughout project life. The non-Federal share of operation and maintenance costs is estimated to be \$190,000, if a one-time payment is made to the Government at the time of construction.

	Ap	PON portion	ICE DE LE	ON INLET	Table 17 PONCE DE LEON INLET COST SHARING PERCENTAGES Apportionment for First Costs and Operations and Maintenance Costs	G PERCEN	TAGES tenance Costs		
Ö	Cost Allocation	ion			Annual Co.	sts Apportic	Annual Costs Apportioned to Project Purposes	Purposes	
				Total A	Total Annual Costs	Feder	Federal Share	Non-F	Non-Federal Share
	Federal	Non-	Non-Federal		Percentage	Dollars	Percentage	Dollars	Percentage
Project Purposes	Share	Share	Total	Dollars	(d/311,000)	(axd)	(f/311,000)	$(p \times q)$	(h/311,000)
	(a)	(q)	(၁)	(g)	(e)	£	(g)	(h)	(j)
Commercial Navigation	80.00%	20.00%	80.00% 20.00% 100.00%	48,000	15.43%	38,400	12.35%	009'6	3.09%
Recreation	20.00%	50.00%	50.00% 50.00% 100.00%	263,000	84.57%	131,500		42.28% 131,500	42.28%
Summary				311 000	100 00%	169 900	j	54 63% 141 100	7022 3707
Sullinally				000,1	00.00.	1		141,100	•

on Cost)	
	Federal	Federal Share	-Non-	Non-Federal Share
	Dollars	Percent	Dollars	Percent
	2,970,000	54.63%	2,466,000	45.37%
Navigation Atds (4,000)	14,000	100.00%	0	0.00%
Real Estate Credit 4,000	4,000	100.00%	0	0.00%
Total 5,454,000	2,988,000	54.79%	2,466,000	45.21%

_	_	_		_	_
	INCE	Non-Federal Share	Percent	84.57%	84.57%
	COST APPORTIONMENT FOR OPERATION AND MAINTENANCE	Non-	Dollars	190,000	190,000
19		Federal Share	Dollars Percent	15.43%	35,000 15.43%
Table 19			Dollars	35,000	
		Initial	Costs	225,000	225,000
		COST APP Item		Operation and Maintenance	Total

ENVIRONMENTAL CONSIDERATIONS

250. Major environmental considerations taken into account during the formulation of the selected plan were the presence of the saltmarsh snake, manatees, and sea turtles in the project area, and preservation of significant historical cultural resources. The saltmarsh snake could easily be captured at night and removed from the construction area. Standard manatee and sea turtle precautions will be in effect during construction to minimize impacts to those species. If trucks are used to haul rock along the beach during construction of the south jetty extension, arrangements will be made to locate and move sea turtle eggs during nesting season. Potentially significant magnetic targets will be included in archeological no-work zones. Diver investigation of other significant magnetic targets reveals modern materials with no historic properties. All available and practicable means and measures have been incorporated into the plan formulation process to ensure that the selected plan is environmentally sound.

FLOOD PLAIN ASSESSMENT

- 251. Executive Order 11988 requires the Federal Government to avoid, if possible, adverse impacts associated with the occupancy and modification of flood plains as well as direct or indirect support of development in those areas where there is a practical alternative. The existing port facilities on Ponce DeLeon Inlet are already in the 100-year flood plain (National Flood Insurance Program). Federal improvement of the existing navigation project will encourage continued use of existing facilities on those lands as well as those already planned for future growth in commerce. Port development will occur with or without the proposed improvement.
- 252. Relocation of commercial fishing, charter boat, and repair facilities is not practical for a port serving those types of vessels. The port facilities are about the 100-year elevation to avoid any serious damages from flooding. Use of alternative Florida ports is impractical as most are in similar flood plain situations. In addition, a seaward extension of the south jetty will cause no negative flood plain or wetland impacts. Therefore, the proposed plan is in compliance with the Executive Order calling for enumeration of those possible impacts.

COASTAL ZONE BARRIER RESOURCES ACT

253. The proposed new Federal investment decision for the Ponce DeLeon Inlet navigation project does not include any recommendations which would result in any new Federal expenditures or financial assistance prohibited by the Coastal Barrier Resources Act (Public Law 97-348); nor were funds obligated in past years for this project for purposes prohibited by this Act.

COASTAL ZONE MANAGEMENT ACT

254. The Coastal Zone Management (CZM) Act of 1972, as amended (PL 92-583) requires all Federal activities inside or outside a state's coastal zone to be consistent with the state's coastal zone management plan if the activities affect natural resources, land uses, or water uses within the coastal zone. By issuance of State Water Quality Certifications on completed projects, the State determines that the authorized projects for which initial construction has been completed where consistent with the state CZM Act. The state will review the permit application and project plans and specifications in order to make a final consistency determination prior to any future project construction.

SUMMARY OF COORDINATION, PUBLIC VIEWS, AND COMMENTS

255. Public views and comments have been solicited at various points during the study process. Pertinent correspondence received to that coordination is in the Environmental Assessment and Appendix C of this feasibility report along with a discussion of the study coordination effort. Coordination of the reconnaissance and feasibility study alternatives began on February 1995 with various public agencies and individuals. In general, public agencies concurred with the study approach and list of measures presented for stabilization of the inlet. Additional comments were solicited during the review of the draft EA. No comments were received. The Florida State Clearinghouse in their November 25, 1998 letter found the study, based on the information contained in the notification of intent and enclosed comments provided by their reviewing agencies, consistent with the Florida Coastal Management Program (FCMP). This letter will be found in Appendix C of the EA.

CONCLUSIONS

- 256. Both structural and nonstructural alternatives received consideration to resolve navigation needs and inlet stability problems on the existing Federal project.
- 257. Initial structural alternatives included six different south jetty configurations, three different north jetty weir openings, an entrance channel realignment, three revetment locations, and a south channel realignment and extension to new public docking facilities. After model testing and other evaluations, a combination of one south jetty extension (Plan A), one revetment measure (plan F), and a dredging alternative (plan G) satisfied planning objectives. Structural alternatives (plans A and F) involve extension of the south jetty further into the ocean and revetment of a portion of the remaining sand spit west of the north jetty. Plan G realigns the entrance and south channels and extends the existing project to public docking facilities on the IWW.

- 258. The nonstructural plan takes effect after plans A and F are implemented. Instead of dredging the entrance channel in its authorized location between the two jetties, a gradual shifting of the channel towards the center of the inlet is expected. That process will be helped as the natural erosion of the sand spit west of the north jetty continues to allow the entrance channel to straighten out in a more east to west orientation. Rather than the northeast to southwest direction it currently follows around the sand spit.
- 259. Plan A consists of a 1,000-foot extension of the south jetty parallel to the existing north jetty. All plans except Plan A and the nonstructural plan had to be eliminated from further consideration when public opposition arose to the proposed fishing park. Then the benefits previously associated with the park could no longer be applied in plan formulation.
- 260. Plan A was identified as the National Economic Development Plan (NED) and is the recommended plan. The total first cost of the recommended plan is estimated at \$5,454,000. The estimated average annual equivalent benefits and costs are \$567,000 and \$419,250 respectively. The benefit to cost ratio is 1.4 to 1.
- 261. Based on the selected plan, modification of the authorized project for navigation improvements at Ponce DeLeon Inlet would include:
 - Construction of a 1,000-foot south jetty extension toward the ocean and parallel to the north jetty, with scour apron and
 - Assumption of maintenance for the new work 1,000-foot ocean extension of the south jetty, with scour apron
 - Maintenance of project channels in deep water as practicable.
- 262. The Ponce DeLeon Inlet Port Authority of Volusia County supports the recommended plan and will provide a letter of intent and preliminary financial plan for securing the non-Federal share of project costs, currently estimated at \$2,466,000 for the new work and a one-time cash contribution at a present worth value at 6 7/8% of \$190,000 for the operation and maintenance costs of the new work.

RECOMMENDATIONS

- 263. I recommend the Federal navigation project at Ponce De Leon Inlet, Florida, be modified by construction of a 1,000-foot south jetty extension toward the ocean and parallel to the north jetty with scour apron, assumption of maintenance for the new work 1,000-foot ocean extension of the south jetty with scour apron, and maintenance of the project channels in natural deep water.
- 264. The recommendation for Federal participation in the selected plan described in this report is made with the provisions that, prior to implementation, the non-Federal sponsor shall be required to enter into a written Project Cooperation Agreement, as required by Section 221 of PL 91-611, as amended, to provide local cooperation satisfactory to the Secretary of the Army, to include the following non-Federal responsibilities:
- a. Enter into an agreement which provides, prior to construction, 25 percent of design costs;
- b. Provide, during construction, any additional funds needed to cover the non-Federal share of design costs;
- c. Provide, during construction, 50 percent of total project costs allocated to recreational navigation as further specified below:
- (1) Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform or assure the performance of all relocations determined by the Government to be necessary for the construction, operation, and maintenance of the project;
- (2) Provide or pay to the Government the cost of providing all retaining dikes, wasteweirs, bulkheads, and embankments, including all monitoring features and stilling basins, that may be required at any dredged or excavated material disposal areas required for the construction, operation, and maintenance of the project; and
- (3) Provide, during construction, any additional costs as necessary to make its total contribution equal to 50 percent of total project costs allocated to recreational navigation.
- d. For project costs allocated to commercial navigation, provide, during the period of construction, a cash contribution equal to 10 percent of the total cost of construction of the general navigation features attributable to dredging to a depth not in excess of 20 feet;
- e. Pay with interest, over a period not to exceed 30 years following completion of the period of construction of the project, up to an additional 10 percent of the total cost

of construction of general navigation features. The value of lands, easements, rights-of-way, and relocations provided by the non-Federal sponsor for the general navigation features, described below, may be credited toward this required payment. If the amount of credit exceeds 10 percent of the total cost of construction of the general navigation features, the non-Federal sponsor shall not be required to make any contribution under this paragraph, nor shall it be entitled to any refund for the value of lands, easements, rights-of-way, and relocations in excess of 10 percent of the total cost of construction of the general navigation features;

- f. Provide all lands, easements, and rights-of-way, and perform or ensure the performance of all relocations determined by the Federal Government to be necessary for the construction, operation, maintenance, repair, replacement, and rehabilitation of the project (including all lands, easements, and rights-of-way, and relocations necessary for dredged material disposal facilities).
- g. Assume responsibility for operating, maintaining, replacing, repairing, and rehabilitating (OMRR&R) all features of the project allocated to recreational navigation, including mitigation features without cost to the Government, in a manner compatible with the project's authorized purpose and in accordance with applicable Federal and State laws and specific directions prescribed by the Government in the OMRR&R manual and any subsequent amendments thereto.
- h. Accomplish all removals determined necessary by the Federal Government other than those removals specifically assigned to the Federal Government;
- i. Grant the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor owns or controls for access to the general navigation features for the purpose of inspection, and, if necessary, for the purpose of operating, maintaining, repairing, replacing, and rehabilitating the general navigation features;
- j. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, replacement, and rehabilitation of the project, any betterments, and the local service facilities, except for damages due to the fault or negligence of the United States or its contractors;
- k. Keep, and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, and other evidence is required, to the extent and in such detail as will properly reflect total cost of construction of the general navigation features, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and local governments at 32 CFR, Section 33.20;

- I. Perform, or cause to be performed, any investigations for hazardous substances as are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601-9675, that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be necessary for the construction, operation, maintenance, repair, replacement, or rehabilitation of the general navigation features. However, for lands that the Government determines to be subject to the navigation servitude, only the Government shall perform such investigation unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;
- m. Assume complete financial responsibility, as between the Federal Government and the non-Federal sponsor, for all necessary cleanup and response costs of any CERCLA regulated materials located in, on, or under lands, easements, or rights-of-way that the Federal Government determines to be necessary for the construction, operation, maintenance, repair, replacement, and rehabilitation of the general navigation features;
- n. To the maximum extent practicable, perform its obligations in a manner that will not cause liability to arise under CERCLA;
- o. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987, and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way, required for construction, operation, maintenance, repair, replacement, and rehabilitation of the general navigation features, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act:
- p. Comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (42 U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army;"
- q. Provide a cash contribution equal to the non-Federal cost share of the project's total historic preservation mitigation and data recovery costs attributable to commercial navigation; and recreational navigation that are in excess of 1 percent of the total amount authorized to be appropriated for commercial navigation and recreational navigation.
- r. Do not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is expressly authorized by statute.

- s. Consistent with the original authorization the non-Federal sponsor will make a one-time advance payment to the government's benefit in an interest-bearing escrow account held by the non-Federal sponsor. All fees to set up and administer the account will be paid by the non-Federal sponsor. All interest generated from this account is to be used by the government for future operations and maintenance of the south jetty extension. The present value of the costs for operations and maintenance is \$225,000 (operation and maintenance of the south jetty extension only). The sponsor's share of these operations and maintenance costs is a one-time payment of \$190,000, calculated at an interest rate of 6 7/8%.
- 265. The non-Federal sponsor furnishes the above assurances after the project has been authorized for construction by execution of a Project Cooperation Agreement with the United States Government.

DISCLAIMERS

266. The recommendations contained herein reflect the information available at this time and current Departmental policies governing formulation of individual projects. They do not reflect program and budgeting priorities inherent in the formulation of a national Civil Works construction program nor the perspective of higher review levels within the Executive Branch. Consequently, the recommendations may be modified before proposals are made for authorization and implementation funding. However, prior to transmittal to the Congress, the Sponsor, the State, interested Federal agencies, and other parties will be advised of any modifications and will be afforded the opportunity to comment further.

JOE R MILLER

Colonel, Corps of Engineers

District Engineer

REFERENCES

H. Hanson and N.C. Kraus. *GENESIS: Generalized Model for Simulating Shoreline Change, Technical Report CERC MP-89-19, Coastal Engineering Research Center, U.S. Army Waterways Engineer Station*. 1989.

National Flood Insurance Program. FIRM Flood Insurance Map, Town of Ponce Inlet and City of New Smyrna Beach, Florida, Volusia County, panels 2 of 2 and 1 of 5, Community-Panel Number 120312 0002 E and 125132 0001 E. June 16, 1992.

Taylor Engineering Inc. Location Map Primary and Secondary Sites, Reach V, Volusia County, Florida.

Taylor Engineering Inc. Project C-9313, Location of Sites 434/434C North & South, and Site V-PDI, Reach IV, Volusia County, Florida, Sheet 2 of 6. February 1997.

Taylor Engineering, personal communication.

Taylor Engineering. Ponce DeLeon Inlet Feasibility Study Engineering Benefits of the Proposed South Jetty Extension. July 1998.

Taylor, R. Bruce, and Others. *Ponce DeLeon Inlet Feasibility Study Numerical Modeling and Shoaling Analysis, Volumes 1 and 2.* Jacksonville, Florida. July 1996.

Taylor, R.B., T.J. Hull, and R. Srinivas. *Ponce DeLeon Inlet Feasibility Study Numerical Modeling and Shoaling Analysis, Addendum 1 - ICWW Deepening and Flood Sinus Evaluations*. Jacksonville, Florida. October 1997.

- U. S. House of Representatives. House Document No. 74, 89th Congress, 1st Session, Ponce DeLeon Inlet, Florida. February 4, 1965.
- U.S. Army Corps of Engineers, Jacksonville District. *General and Detail Design Memorandum, Ponce DeLeon Inlet, Florida.* Jacksonville, Florida. November 29, 1967.
- U.S. Army Corps of Engineers, Waterways Experiment Station. *Physical Model Studies of Ponce DeLeon Inlet, Florida, Technical report CHL-97-23.* Vicksburg, Mississippi. September 1997.
- U.S. Army Corps of Engineers. 1973 Annual Report of the Chief of Engineers on Civil Works Activities, Volume II, Department of the Army/Corps of Engineers, Extract Report of the Jacksonville, Fla., District. 1973.

- U.S. Army Corps of Engineers. 1974 Annual Report of the Chief of Engineers on Civil Works Activities, Volume II, Department of the Army/Corps of Engineers, Extract Report of the Jacksonville, Fla., District. 1974.
- U.S. Army Corps of Engineers. 1975 Annual Report of the Chief of Engineers on Civil Works Activities, Volume II, Department of the Army/Corps of Engineers, Extract Report of the Jacksonville, Fla., District. 1975.
- U.S. Army Corps of Engineers. Policy and Planning Guidance for Conducting Civil Works Planning Studies, ER 1105-2-100. Washington, D.C. December 28, 1990.
- U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Ocean Service. *United States Coast Pilot & Atlantic Coast: Cape Henry to Key West.* 1993.
- U.S. Fish & Wildlife Service. Fish and Wildlife Coordination Act Report, Ponce Inlet Navigation Study. Appendix II. Jacksonville, Florida. September 26, 1996.

University of Florida, Coastal and Oceanographic Engineering Laboratory, Florida Engineering and Industrial Experiment Station. *Report on the Performance of the Ponce DeLeon Inlet, Florida Improvement System*. Gainesville, Florida. September 1973.